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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,227	06/23/2006	Gregory Fron	W51.12-0028	9143

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MINNEAPOLIS, MN 55402-3244

EXAMINER
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TRAN, PABLO N

ART UNIT	PAPER NUMBER
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2618

MAIL DATE	DELIVERY MODE
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09/22/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/584,227	<b>Applicant(s)</b> FRON, GREGORY	
	<b>Examiner</b> Pablo N. Tran	<b>Art Unit</b> 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06/23/06.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claim 4 recites the limitation "said coupling". There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:  
  
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 1 and 3-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bethea et al. (hereinafter "Bethea", US Pat No. 6,564,038) in view of Reinhardt (US Pat. No. 6,754,476).

As per claims 1 and 10, Bethea disclosed a radiofrequency and/or microwave power amplification device (see fig. 2/no. 205), in particular for a radio communication terminal, having means for shielding (see fig. 2/no. 200) the device; and means for controlling (see fig. 2/no. 300) a power supplied at the output of the device, including a power control loop having detection means (see fig. 2/no. 110) and power amplification

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means (see fig. 2/no. 112), wherein the control means also include at least one sensor (see fig. 2/no. 110, 210) for detecting energy radiated in the device.

Bethea disclosed such power control loop means (see fig. 3) but not explicitly a reference means and a comparison means. However, such power control loop having such means is well known in the art, as taught by Reinhardt (see fig. 6/item R.ex. and OP1, col. 5/ln. 40-col. 6/ln. 45). Therefore, it would have been obvious to one of ordinary skill in the art for Bethea to utilize such power control loop, as taught by Reinhardt, in order to prevent undesired transmission power fluctuations.

As per claim 3, the modified apparatus of Bethea and Reinhardt further disclosed the sensor belongs to the group including: inductors; routing lines of a printed circuit of the device; MEMS (Micro-Electro-Mechanical Systems); radiating elements printed on a printed circuit of the device; tuned LC or RLC circuits (see Bethea, fig. 2/no. 110, 210).

As per claim 4, the modified apparatus of Bethea and Reinhardt further disclosed the power amplification means and the sensor are placed near one another, so as to optimize the coupling (see Bethea, fig. 2, col. 3/ln. 38-col. 4/ln. 36).

As per claim 5, the modified apparatus of Bethea and Reinhardt further disclosed the shielding means cause an attenuation of at least 10 dB of energy outside the device, detected by the sensor with respect to the energy radiated in the device, detected by the sensor (see Bethea, fig. 2, col. 3/ln. 38-col. 4/ln. 36, see Reinhardt, fig. 6, col. 5/ln. 40-col. 6/ln. 29).

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As per claim 6, the modified apparatus of Bethea and Reinhardt further disclosed the sensor is a tuned LC or RLC circuit, the values of the components of the tuned circuit are selected so as to maximize the power supplied at the output at least one predetermined operating frequency of the device (see Bethea, fig. 2, col. 3/ln. 38-col. 4/ln. 36).

As per claim 7, the modified apparatus of Bethea and Reinhardt further disclosed the control means enable to control of the power supplied at the output according to at least one parameter belonging to the group including: an operating temperature of the device; a supply voltage of the device; a load impedance of the device (see Bethea, fig. 2, col. 3/ln. 38-col. 4/ln. 36, see Reinhardt, col. 5/ln. 40-col. 6/ln. 29).

As per claim 8, the modified apparatus of Bethea and Reinhardt further disclosed the sensor is integrated into the detection means (see Bethea, fig. 2, col. 3/ln. 38-col. 4/ln. 36).

As per claim 9, the modified apparatus of Bethea and Reinhardt further disclosed the shielding means include a metal shielding cover having a surface substantially parallel to a printed circuit forming the base of the device and four surfaces substantially perpendicular to the surface coming into contact with each of the edges of the printed circuit (see Bethea, fig. 2, col. 3/ln. 38-col. 4/ln. 36).

5. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bethea et al. (hereinafter "Bethea", US Pat No. 6,564,038) in view of Reinhardt (US Pat. No. 6,754,476) and further in view of Korisch et al. (hereinafter "Korisch", US Pat. No. 6,957,051).

As per claims 2 and 11, the modified apparatus of Bethea and Reinhardt disclosed all the claimed limitation as stayed above in claim 1 except for the limitation of the shield which reflects radiated energy in the device toward the sensor. Korisch teach such that the sensor measure the energy radiated from the shield (see fig. 3, col. 2/ln. 42-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention for the modified apparatus of Bethea and Reinhardt to utilize such teaching of Korisch in order to cancel the effects of the electromagnetic field in a predetermined region effectively.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo Tran whose telephone number is (571)272-7898. The examiner normal hours are 9:30 -5:00 (Monday-Friday). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571)272-7899. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) System. Status information for Published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-directauspto.gov>. Should You have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (in USA or CANADA) or 571-272-1000.

September 17, 2008

/Pablo N Tran/

Primary Examiner, Art Unit 2618